Calamagrostis stricta ssp. inexpansa

Status

Federal status: G5T5 N?, Not listed
NH state status: SU, Endangered
ME state status: S1, Endangered

Taxonomy for this taxon has some challenges as species have been melded and separated over time. One synonym for this taxon is *Calamagrostis lacustris*, which is still identified separately by the Association for Biodiversity Information. This synonym is on the Regional Foresters Sensitive Species list separate from *Calamagrostis stricta* subsp. *inexpansa* because it is ranked as G3Q N3.

Population trends are unknown, but it has probably always been a rare taxon in northern New England.

The expert panel indicated that the current outcome for this species is B-C across its range and in the WMNF. It may decline in some locations, but new habitat will be created, so uncertain if outcome will change.

Distribution

This species is circumboreal. It ranges from Alaska east to Newfoundland Island, south to New Jersey, and west to California.

New Hampshire Natural Heritage Inventory has two listings for this subspecies, one under *Calamagrostis stricta* subsp. *inexpansa* and one under the synonym *Calamagrostis lacustris*. Combined occurrence records indicate 5 historical and 8 extant occurrences. Historical occurrences were in Hadleys Purchase, Thompson & Meserve, Sargeants Purchase, Bethlehem, and Livermore. Extant occurrences are in Berlin, Hart's Location, Stark, Albany, Franconia, Lincoln, and Woodstock. The Berlin occurrence is on the WMNF, as were all the historic occurrences except that in Livermore.

In Maine, this species is known from Aroostook, Piscataquis, Hancock, and Oxford Counties. The one Oxford County occurrence for which details are known is a historic occurrence from Speckled Mountain, which is in the WMNF.

Habitat

Calamagrostis stricta subsp. *inexpansa* uses a variety of open, wet habitats. In New Hampshire, these include wet cliffs and ledges, river and stream banks, bogs, fens, seeps, and wet alpine. This species needs open habitats. As a result, it benefits from beaver activity and other flooding inland, ice-scouring near the coast and along rivers, and ice and snow-loading in alpine areas.

Elevations in northern New England range from coastal in Maine to over 3600 ft in New Hampshire. Occurs on both calcareous and granite ledges, so pH is not a habitat definer.

Limiting Factors

If succession moves an open community toward a forested community, then habitat for this species could be lost or reduced. Lack of disturbance needed to keep suitable habitat open could facilitate succession. Many open wetlands remain open due to soils and

natural hydrology, but disturbance helps keep many riverbanks and shorelines open. Therefore succession is a greater concern along shorelines than inland.

Populations could be threatened by heavy recreational (hiking) use. Trampling is greater concern for inland habitats.

Genetics may be a concern, but currently this is more of an information gap than a threat. This species occurs in wetland environments that can be negatively impacted by invasive plant species.

Viability concern

Taxonomy makes determination of viability a challenge. This taxon is on the SVE list because *Calamagrostis lacustris* is on the RFSS list due to its G3Q N3 ranking, which indicates a potential range-wide viability concern. However if these taxa have been melded, the concern may be reduced. Rankings for *Calamagrostis stricta* subsp. *inexpansa* do not indicate a range-wide concern. Until this is resolved through a RFSS update, this taxon remains of potential viability concern.

Management activities that might affect populations or viability

The primary threat identified for inland habitats is trampling by recreationists. Management and education that would help keep hikers on designated trails would benefit this species.

Management that would help keep stream or river banks where this species occurs open would be beneficial.

Activities such as dam construction, dam removal, and road or trail building could alter suitable wetland habitat by changing the hydrology that keeps it open.

Dam construction and management to benefit beaver could increase suitable habitat if it would create suitable open wet habitat where none currently exists. Whether this species would disperse into that habitat would be unknown.

Management to control or eradicate invasive plants in wetlands could benefit this species.

References

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